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OM nucleic - nucleic search, using sw model

Run on: February 16, 2003, 16:42:40 ; Search time 2277.41 Seconds
(without alignments)
15566.316 Million cell updates/sec

Title: US-09-497-967-102
Perfect score: 1410
Sequence: 1 atgaagacacatccctgg.....cttaacctgtataaa 1410

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 24791104 seqs, 12571243825 residues

Total number of hits satisfying chosen parameters: 49582208

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_NA_Main:*

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2: /cgn2_6/podata/1/pna/US006_COMB seq:*

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43: /cgn2_6/podata/1/pna/US102B COMB seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	1410	100.0	140	18	US-09-497-967-102	Sequence 102, App1
2	1404	99.6	1404	18	US-09-497-967-102	Sequence 5, App1
3	1400.8	99.3	1404	18	US-09-497-967-102	Sequence 53, App1
4	784.4	55.6	1410	18	US-09-497-967-102	Sequence 46, App1
5	782.6	55.5	1404	18	US-09-497-967-102	Sequence 3, App1
6	782.6	55.5	1404	18	US-09-497-967-102	Sequence 8, App1
7	138	9.8	138	18	US-09-497-967-102	Sequence 74, App1
c	8	123	8.7	123	18	US-09-497-967-102
c	9	105	7.4	117	18	US-09-497-967-102
c	10	104	7.4	104	18	US-09-497-967-102
c	11	100	7.1	100	18	US-09-497-967-102
c	12	100	7.1	100	18	US-09-497-967-102
c	13	99	7.0	99	18	US-09-497-967-102
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c	15	95	6.7	95	18	US-09-497-967-102
c	16	95	6.7	95	18	US-09-497-967-102
c	17	94	6.7	94	18	US-09-497-967-102
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c	19	92	6.5	92	18	US-09-497-967-102
c	20	92	6.5	92	18	US-09-497-967-102

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				Sequence 4, Appl
				Sequence 9, Appl
				Sequence 2, Appl
				Sequence 14, Appl
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				Sequence 5263, Ap
				Sequence 5263, Ap
				Sequence 5, Appl
				Sequence 2425, Ap
				Sequence 2425, Ap
				Sequence 2425, Ap
				Sequence 269, Ap
				Sequence 13409, A
				Sequence 11300, A
				Sequence 859, Ap

ALIGNMENTS

SEQUENCE 1
S-09-497-967-102
Sequence 102, Application US/09497967
GENERAL INFORMATION:
APPLICANT: Clark, Theodore G.
APPLICANT: Dickerson, Jr., Harry W.
APPLICANT: Lin-Tian-Long
TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
FILE REFERENCE: 235 00170101
CURRENT APPLICATION NUMBER: US/09/497,967
CURRENT FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: 60/131,121
PRIOR FILING DATE: 1999-04-27
PRIOR APPLICATION NUMBER: 60/118,634
PRIOR FILING DATE: 1999-02-04
PRIOR APPLICATION NUMBER: 60/122,372
PRIOR FILING DATE: 1999-03-02
PRIOR APPLICATION NUMBER: 60/124,905
PRIOR FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 102
SOFTWARE: PatentIn ver. 2.1
SEQ ID NO 102
LENGTH: 1410
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE: synthetic
OTHER INFORMATION: Description of Artificial Sequence:
OTHER INFORMATION: 55kd 1-antigen coding region

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Query Match 100.0%; Score 1410; DB 18; Length 1410;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1410; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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61 GCTAACTGTCTGTGGAAACCGAGACCAACCCCTGGACAGCTGGGAAAC 120
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RESULT 3
 US-097-967-53 Application US/09497967
 Sequence 53, Application US/09497967
 ; GENERAL INFORMATION:
 ; APPLICANT: Clark, Theodore G.
 ; APPLICANT: Dickerson, Jr., Harry W.
 ; APPLICANT: Lin, Tian-Long
 ; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
 ; TITLE OF INVENTION: ICHTHYOPHTHIRIUS
 ; FILE REFERENCE: 235-001/0101
 ; CURRENT APPLICATION NUMBER: US/09497967
 ; CURRENT FILING DATE: 2000-02-04
 ; PRIORITY APPLICATION NUMBER: 60/131,121
 ; PRIORITY FILING DATE: 1999-04-27
 ; PRIORITY APPLICATION NUMBER: 60/118,634
 ; PRIORITY FILING DATE: 1999-02-04
 ; PRIORITY APPLICATION NUMBER: 60/122,372
 ; PRIORITY FILING DATE: 1999-03-02
 ; PRIORITY APPLICATION NUMBER: 60/124,905
 ; PRIORITY FILING DATE: 1999-03-17
 ; NUMBER OF SEQ ID NOS: 102
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO: 53
 ; LENGTH: 1404
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: synthetic G5
 ; OTHER INFORMATION: proline mutant i-antigen
 ; OTHER INFORMATION: proline mutant i-antigen
 US-097-967-53

Query Match	Score	Length	Match	Start	End	Sequence
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Db	1	ATGAAAGAACATCAGTCTGGTATCCGTATCATCTGTTCATCAACAGATCAAGTCT	60			
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Db	121	CCTGCTAACTGTGTCAGAACGACTCTCATACAAACAGTGTGCTTCGTTGCTGTG	180			
Qy	181	CCTGGAGCTCTACCTGTACCCCTGTCTCTAGAAAGGAGCTGGTGAAGCTCAGCTAAC	240			
Db	181	CCTCGTCTACCGCTAACCTGTACCCCTGTCTCTAGAAAGGAGCTGGTGAAGCTCAGCTAAC	240			
Qy	241	CCTCGTCTACCGCTAACCTGTACCCCTGTCTCTAGAAAGGAGCTGGTGAAGCTCAGCTAAC	300			
Db	241	CCTCGTCTACCGCTAACCTGTACCCCTGTCTCTAGAAAGGAGCTGGTGAAGCTCAGCTAAC	300			
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Db	361	AACCTCTAACAGGAAACGCTCTAACCTCAACGCTGGAGGCTGTACCGCTCTAACATCGT	480			
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Qy	1141	GAGTGTCCTGCTGAAACCTGCTGTAACCCAGGAAACCCCTTAACCTAACAGGAGCT 1204
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Qy	1201	TCTGAGTGTGTGAAGTGTGTGAACCTGCTGTAACCCAGGAAACCCGACTGGGTGCT 1264
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Db	1261	GGAAATGCAACCTGCTGCTGAAACCTGCTGTAACCCAGGAAACCCCTTAACCTAAC 1324
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Db	1321	CCTGAGTGTCTGACTAGAAGAACATCGACTGACTCTGACTCTGCTCTGCTCTGCTCTG 1384
Qy	1381	CTGCTGATCTCTTACCTGTGTAACAGAACATCGACTGACTCTGACTCTGCTCTGCTCTG 1404
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PRIOR FILING DATE:	1999-02-04	Db	841	AGTACATECCCTACCTGCTCCAGCAAAATAAGTGGCTGACCCACTGGCTGG	900
PRIOR APPLICATION NUMBER:	60/122,372	Qy	901	GCTGCTTACCTCGTGAACATCGCTTGCTGCGAACCCGCTATGCCCTCT	960
PRIOR FILING DATE:	1999-03-02	Db	901	GCCGCTACTTTAGCCAAAATAATGTAATTGCTGCGCTATGGTACTGGTAGT	960
PRIOR FILING DATE:	1999-03-17	Qy	961	GGAGCTACCAACTACCTGATCCTGACAGGAGTCGACTCTGCTGTAAC	1020
NUMBER OF SEQ ID Nos:	102	Db	961	GGAGCAACTAATTATGTAATTAAAGCAATGCTAAATGGTCTGACTTTTAT	1020
SOFTWARE:	Patentin Ver. 2.1	Qy	1021	TTCGACGGAAACAACCTCCAGCTGGATCTCTGCTGAGGTGTCCTGCTGTAACAG	1080
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241 CCTCCCTGCTACCGCTAACCTGGTGACCCCAGTGTGACCTGAAAGCTCTCTGGAACCG 300	Qy	1381	CTGCTGATCTTACCTGGTAAAGTGTGACTCTGCTCTCTCTCTCTCTCTCTG	1410	
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301 ATCGCTGGAGGAGTACCGACTAGCTGGTATCATCAGCAGTGTGAACCTGGCATC 360	Qy	RESULT 5			
301 ATTCGAGTGGAGAACAGATTATCAGAAATAATCAGAAATGTTATGTTAGATG 360	Db	US-09-497-967-3			
361 AACTCTAACGAAACGGTCCAACTCTGGAGGCTCTGACCGCTGAAACGCTGCTACCTG 420	Qy	Sequence 3, Application US/09497967			
361 AATTATTTATGAAATAATGCTCCAAATTGTTAACCTGCTGTTAACCTGCTG 420	Db	GENERAL INFORMATION:			
421 CCTGGAAACGGTGGAGGACTCTGACCGCTGCTACCTGCTGAAACGCTGCTACCTG 480	Qy	APPLICANT: Clark, Theodore G.			
421 CGGTAAACGAGTGTGCTGCTCTGGAGGACTCTGACCGCTGCTACCTGCTG 480	Db	APPLICANT: Dickerson, Jr., Harry W.			
481 TGTAACTGTTGGCTCTGCTCTGGACCGCTCTGGACGAGGGACTGACCCACTACGTG 540	Qy	APPLICANT: Lin, Tian-Long			
481 TGTAACTGTTGGCTCTGGACCGCTCTGGACGAGGGACTGACCCACTACGTG 540	Db	TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF			
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722 TGTCTGAGGAAACCATCTGCTGGTGGAGTGAACACTGGCTCTGCTGAAACACCGAG 780	Db	PRIOR APPLICATION NUMBER: 60/122,372			
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US-09-497-967-3	Qy	TYPE: DNA			
US-09-497-967-3	Qy	ORGANISM: Ichthyophthirius multifiliis			
US-09-497-967-3	Qy	Query Match 55.5%; Best Local Similarity 72.5%; Score 782.6; DB 18; Pred No 5; ge-210;			

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Db	241	CCACCTGCTGTAATGGTACATGCTAAATAGTCACATAATGTAACGTTAAATGCCCTGTCGTAACCTGGTACCGCA	300						
Qy	301	ATCGCTGGAGGAGCTACCGACTACGCTGCTATCATCACGAGTGTGCAACTGTCGCACT	360						
Db	301	ATTCGAGGGAGGAAACAGATTATGAGCAATTATCACAGAAATGTTAAATGAGATT	360						
Qy	361	AACPTCTAACCGGAAACCTCTTAACTCTAACGCTGGAGCTCTACTGTACCGCTGT	420						
Db	361	AATTTTTAAATGAAAATCTCCAAATTCTAACGTTGCTGTAATGACAGCTGT	420						
Qy	421	CCTGTGAACCGGCTGGAGGAGCTGTCGCTGCTACCATGCTGGTCAG	480						
Db	421	CGGTAAAZAGTGAATGTTGCTGATTGCTGTAATGCGCTCATAGTCGCATAA	480						
Qy	481	TGTAATGTCGCTTCTACCTGGAAACGGAGTGTGACCGACTACGT	540						
Db	481	TGTAATGTCGCTTCTACCTGGAAACGGAGTGTGACCTGATGTTGAGTAACTCTGATTATGT	540						
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Db	541	AGATCATTCACAGAATGTTAAATGACATTACTTAACTGTAATATGGT	600						
Qy	601	AACACCCCTTCACCCCTGAAAGCTCATGTAACCCCTGTCCTGTCATCAAGCCTGG	660						
Db	601	AAATACCTCTTCATTCAGGAAATGTTAACTGCAACCCPTGTCGGCAATTAAACCTGT	660						
Qy	661	AACGTGGCTCAGGCTACCCCTGGAAACCGAGCTACCATCACCGCTCAGTGAAGTGGCT	720						
Db	661	AATGTGTGCTAAGCTTAACTTAACTGTTATGATGCTAAATGTAATGTTAACTGTAATATGGT	720						
Qy	721	TGCTCTGACGAAACCATCTGCTCTGGTGTGAAACCTGGTCTACAAACCCGAG	780						
Db	721	TGCCCTGATGGTACTATAAGTGTGCTGTCGGTAAATAATGGTAGCACAAAACACTGAA	780						
Qy	781	TGTACCAACTCTGCTCTAACTCTAACAAACAGCTCAACTAACCGCTGGAAAC	840						
Db	781	TGTAATGTCGCTTAATTAACTGCTTAATTCAGTCCAGGTAAT	840						
Qy	841	TCTACCTGTCGCTGCTCTGCTAACAAAGGACTACGGAGCTACCGCTGGAGGA	900						
Db	841	AGTACATGCTCCTGCTCTGCTAACATGGTAAAGTGGTGAAGCTGGAGTGG	900						
Qy	901	GCTGCTAACCTGGCTAACAGTGTAACTGGCTGTCGCTGAAACCGCTATCGCTT	960						
Db	901	GCGCCTACTTAACTGCTAACATGTTAACTGCTAACGATGCTAACGTTCTGT	960						
Qy	961	GGAGCAACTTATGTTAAATGAAATGCTAACGATGCTAACGTTCTGT	1020						
Db	961	GGAGCAACTTACGGTAACTGCTAACGATGCTAACGTTCTGT	1020						
Qy	1021	TTCGACGAAACACTCAGCTGGTACTATAAGTGTGCTGTCGGTAAATAATGGTAGAAACAAATA	1080						

Qy	181	CCTGGAGCTTCTACCTGTACCCCTTGTCCCTAGAAGAAGAACGCTGGAGCTACGCCAAC	240	Db	1261	GTTATGATACTGACTAGTGTATAAAAATTAACTTCTGCCGCTGAAGTAAATTAA	1320		
Db	181	CCCTGGTGTAGTACGCTACACCTTCCATAAAATAATGCTGCTTACCAATT	240	Qy	1321	CCTGAGTCTGCTTAAGAGAAACATCCAGTGTGACTCTGCTAACCTCTCTCTCTG	1380		
Qy	241	CCCTCTGCTACCTGTGACCCAGTGAACGTGTCCTGTAACCTGAAACCCCT	300	Db	1321	CCTGAGTCTGCTAAAAAATAATGATGATCTGCTTAATTCATTCAATTTCCTTA	1380		
Db	241	CCACCTGCTACTGCTAAATTAGTCACATAATGTCAGTTAAATGCCCTCTGTAACCCA	300	Qy	1381	CTGCTGATCTTCTTAA	1397		
Qy	301	ATCGTGGAGGACTACCGACTACCGTGTATCATCACCGACTGTGAACTGCGCAT	360	Db	1381	TATGATTCTTATA	1397		
Db	301	ATGGAGGTGGCAACAGATTAGCAACATAATCACAGAAATGTTATGAGATT	360	RESULT 7					
Qy	361	AACCTTACAACAGAACGACGCTCTAACTTCAACAGCTGAGCTTGTACTGTACCGCTGT	420	Sequence 74, Application US/09497967					
Db	361	AATTTTATAATGCAATGCTTAAATTAAATGGAGGTGGCTACTACAGCACAGCTGT	420	; GENERAL INFORMATION:					
Qy	421	CGCTGTGAAACCGCGTGGAGGAGCTGTGACCGCTGAAACGCTGTGACCGCTGTAG	480	; APPLICANT: Clark, Theodore G.					
Db	421	CCGGTAACAGAGTGTGGCATGTGCTGCTGATGCTGCTGATGCTGCTGATCAA	480	; ATTORNEY: Dickerson, Jr., Harry W.					
Qy	481	TGTAACCTGGCTTGTCTACGGAAACGCCCTGACGAGGTGACCCGACTCTGT	540	; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF					
Db	481	TGTAACCTCGCATGCTTACTGTGACTGACTGACTGACTGACTGATTGTT	540	; ICHTHYOPHTHIRIUS					
Qy	541	CGCTCTPTCACCGAGGTGTGAAGTGTGCTGCTGAACCTTACTACAACGGAAACAGGA	600	; FILE REFERENCE: 235,00170101					
Db	541	AGATCATTCAGAAATGTTAAATGAGTAACTTACTATAATGGTAAATAGT	600	; CURRENT APPLICATION NUMBER: US/09/497,967					
Qy	601	AACACCCCTTCAACCCCTGGAAAGCTCTAGTGTACCCCTTGTCTGCTATAGCCCTG	660	; PRIORITY DATE: 2000-02-04					
Db	601	AAATCTCTTCAACCTCAGTAAAGTAAATGACACCTGCTGGCAATTAAACCTGCT	660	; PRIORITY APPLICATION NUMBER: 60/131,121					
Qy	661	AACTGCTGCTAGGCTACCGCTACCCCTGGAAACGAGCTTACCATCACCTCTAGTGTACGTCGCT	720	; PRIORITY APPLICATION NUMBER: 60/118,634					
Db	661	AATGTTGCTTAAGGTTACTTCTAGTGTAAATGAGTAACTGATGTTACGTTGCA	720	; PRIORITY FILING DATE: 1999-04-27					
Qy	721	TGTCCTGACCGAACCATCTGTGCTGGAGTGAACACTGGCTGCTAGCTAACCGAG	780	; PRIORITY APPLICATION NUMBER: 60/122,372					
Db	721	TGCCCTGATGGTACTATAAGTGTGCTGGCTGAGTAATATGGTAGACAAACCTGAA	780	; PRIORITY FILING DATE: 1999-03-02					
Qy	781	TGTACCAACTGTGCTTAACTCTACACAAACGCCACTACGGAGCTTACGGCTACG	840	; PRIORITY APPLICATION NUMBER: 60/124,905					
Db	781	TGTACTATGTGCTCTTACATTACATAATAATGCTCTTAATTCATCCAGGTAT	840	; PRIORITY FILING DATE: 1999-03-17					
Qy	841	TCTACCTGTCGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGAGGA	900	; NUMBER OF SEQ ID NOS: 102					
Db	841	AGTATGCTTACCTGGCCAGAAATTAAAGATTATGCTGCTGAAACGCTACTGAGTGT	900	; SEQ ID NO: 74					
Qy	901	GCTGCTACCCCTGGCTAACGAGTGTAAACTCGCTGCTGAGGAACGGCTATCGCTCT	960	; SOFTWARE: Patentin Ver. 2.1					
Db	901	GCCGCTACTTTAGCCAAATAATGATGCTTAATGAGATGCTAAATGCTGTTACTGCAATGCTGT	960	; TYPE: DNA					
Qy	961	GGAGCTTAAACTACGGTGTGAGTCCGAGCGAGTGTGACTGTCTGCTAACCTCTAC	1020	; ORGANISM: Artificial Sequence					
Db	961	GGACCAACTTAATGTTATGTTATTTATAACAGATGCTAAATGCTGTTACTGCTA	1020	; FEATURE: OTHER INFORMATION: Description of Artificial Sequence					
Qy	1021	TTCGACGAAACACTTCAAGCTGGCTGCTGCTGCTGCTGCTGCTAACAG	1080	; OTHER INFORMATION: SEQ ID NO: 74					
Db	1021	TTCATGTTAAATTTCTAGGAGGATAGTAGATGCAAAGCATGTCAGAAATAA	1080	; LENGTH: 138;					
Qy	1081	GTCCAGGGAGCTGCTGGCTACCCCTGGAGAACCCGCTACCTGATCCTGCTGCTG	1140	; LENGTH: 138;					
Db	1081	GTAAAGGGCTAGCAACTCGAGGTGACTGCTGCTGCTGCTGCTGCTGCTG	1140	; SCORE: 138;					
Qy	1141	GAGTGTCTGCTGCTGAGCTGCTGAGCTGCTGAGCTGCTGAGCTGCTG	1200	; DB: 121 GTGGAGGAGCTGCTGACC 138					
Db	1141	GAATGCTCTGCTGCTGAGCTGCTGAGCTGCTGCTGCTGCTGCTG	1200	; SEQ ID NO: 75, Application US/09497967					
Qy	1201	TCTGAGTGTGAGTGTGCTAACCTGCTAACACTTACACCAAGCAGCTGGTGGCT	1260	; GENERAL INFORMATION:					
Db	1201	TCGAGTGTGAGTGTGCTAACCTGCTAACACTTACACCAAGCAGCTGGTGGCT	1260	; APPLICANT: Clark, Theodore G.					
Qy	1261	GGATCGGACACCTGTACCCCTGTAACAGAACGCTGACTCTGGAGCTAACCTG	1320	; ATTORNEY: Dickerson, Jr., Harry W.					

LENGTH: 100
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide primers
; SEQ ID NO: 967-72

Query Match 7.1% Score 100; DB 18; Length 100;
Best Local Similarity 100.0%; Pred. No. 2.4e-17;
Matches 100; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 165 CCCTGCCTGCCTTCGAGCTTCTACCTGACCCCTTGCTCAGAAGAGGAGC 224
Db 1 CGCTGCCTTCGCTCGCTGGAGCTTCACTGACCCCTTGCTCAGAAGAGGAGC 60

Qy 225 TGGAGCTCAGCCTAACCCCTCTGGTACCGCTAACCTGGTG 264
Db 61 TGGAGCTCAGCCTAACCCCTCTGGTACCGCTAACCTGGTG 100

RESULT 12
US-09-497-967-79/C
Sequence 79, Application US/09497967
GENERAL INFORMATION:
APPLICANT: Clark, Theodore G.
APPLICANT: Dickerson, Jr., Harry W.
APPLICANT: Lin, Tian-Long
TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
TITLE OF INVENTION: ICHTHYOPHTHIRUS
FILE REFERENCE: 235.00170101
CURRENT APPLICATION NUMBER: US/09/497,967
CURRENT FILING DATE: 2000-02-04
PRIORITY APPLICATION NUMBER: 60/131,121
PRIORITY FILING DATE: 1999-04-27
PRIORITY APPLICATION NUMBER: 60/122,372
PRIORITY FILING DATE: 1999-03-02
PRIORITY APPLICATION NUMBER: 60/124,905
PRIORITY FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 102
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 79
LENGTH: 100
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide primers
; SEQ ID NO: 76
LENGTH: 99
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide primers
; SEQ ID NO: 76

Query Match 7.0% Score 99; DB 18; Length 99;
Best Local Similarity 100.0%; Pred. No. 4.6e-17;
Matches 99; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 532 GACTAGTGGCTTTCACCGAGTGTGAAGTGCCCTGAACCTCTACTACACGGA 591
Db 1 GACTAGTGGCTTTCACCGAGTGTGAAGTGCCCTGAACCTCTACTACACGGA 60

Qy 592 AACAAAGAAACACCCCTTCAACCCMGGAAAGTCAG 630
Db 61 AACAAAGAAACACCCCTTCAACCCCTTCAG 99

RESULT 14
US-09-497-967-73/C
Sequence 73, Application US/09497967
GENERAL INFORMATION:
APPLICANT: Clark, Theodore G.
APPLICANT: Dickerson, Jr., Harry W.
APPLICANT: Lin, Tian-Long
TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
FILE REFERENCE: 235.00170101
CURRENT APPLICATION NUMBER: US/09/497,967
CURRENT FILING DATE: 2000-02-04
PRIORITY APPLICATION NUMBER: 60/131,121
PRIORITY FILING DATE: 1999-04-27
PRIORITY APPLICATION NUMBER: 60/118,634
PRIORITY FILING DATE: 1999-02-04
PRIORITY APPLICATION NUMBER: 60/122,372
PRIORITY FILING DATE: 1999-03-02
PRIORITY APPLICATION NUMBER: 60/124,905
PRIORITY FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 102
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 79
LENGTH: 100
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide primers
; SEQ ID NO: 73
LENGTH: 95
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide primers
; SEQ ID NO: 73

Query Match 6.7% Score 95; DB 18; Length 95;
Best Local Similarity 100.0%; Pred. No. 6.1e-16;
Matches 95; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 242 CTCCTGCTACCGCTAACCTGTCAGCTGTAAGGTGAAGTGTCTGGACCGCT 301
Db 1100 GAAACACTGGCTGCTGAAACCGAGTGTACCAACTGCTCTAACCTCTAACAA 812
Db 100 GAAACACTGGCTGCTGAAACCGAGTGTACCAACTGCTCTAACCTCTAACAA 41

Qy 813 CAACGCTCTAACCTCAACCCCTGGAAACCTCCTACCTGTCTG 852
Db 40 CAACGCTCTAACCTCAACCCCTGGAAACCTCCTACCTCTAACAA 1

RESULT 13
US-09-497-967-76
Sequence 76, Application US/09497967
GENERAL INFORMATION:
APPLICANT: Clark, Theodore G.
APPLICANT: Dickerson, Jr., Harry W.
APPLICANT: Lin, Tian-Long
TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF

Db 95 CCTCTGGTACCGCTAACCTGGTACCCAGTGTAACTGTCCTGCTGCGAACCGCTA 36
 Qy 302 TCGCTGGGGAGCTACCGACTAGCTCTATCATC 336
 Db 35 TCGCTGGGGAGCTACCGACTAGCTCTATCATC 1

RESULT 15

US-09-497-967-77/c
 ; Sequence: 77, Application US/09497967
 ; GENERAL INFORMATION:
 ; APPLICANT: Clark, Theodore G.
 ; APPLICANT: Dickerson, Jr., Harry W.
 ; APPLICANT: Lin, Tian-Long
 ; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
 ; FILE REFERENCE: 235_00170101
 ; CURRENT APPLICATION NUMBER: US/09/497, 967
 ; PRIORITY NUMBER: 60/131,121
 ; PRIORITY FILING DATE: 2000-02-04
 ; PRIORITY NUMBER: 60/118,634
 ; PRIORITY FILING DATE: 1999-04-27
 ; PRIORITY NUMBER: 60/122,372
 ; PRIORITY FILING DATE: 1999-03-02
 ; PRIORITY NUMBER: 60/124,905
 ; PRIORITY FILING DATE: 1999-03-17
 ; NUMBER OF SEQ ID NOS: 102
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 77
 ; LENGTH: 95
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:
 ; OTHER INFORMATION: Oligonucleotide primers

US-09-497-967-77

Query Match 6.7%; Score 95; DB 18; Length 95;
 Best Local Similarity 100.0%; Pred. No. 6.1e-16;
 Matches 95; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 607 CCTTCAACCTGGAAAGCTCAGTGTACCCCTGCTATCAAGCTGCTAACGTG 666
 Db 95 CCTTCAACCTGGAAAGCTCAGTGTACCCCTGCTATCAAGCTGCTAACGTG 36
 Qy 667 GCTCAGGCTACCCCTGGAAAGCAGCGCTACATCAC 701
 Db 35 GCTCAGGCTACCCCTGGAAAGCAGCGCTACATCAC 1

Search completed: February 17, 2003, 01:36:13
 Job time : 2279.41 secs